

**Report type:** Neuroreader® Report **Gender:** Male  
**Image ID:** RyDa\_20210820\_001 **Age:** 77  
**Clinical image ID:** 0300937767 **User name:** Ryan Darby  
**Analysis date:** 2021-Aug-20 18:54:24

## Reference Head Size

The measured total intracranial volume (mTIV)	2301 mL
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## Left-Right Asymmetry Index

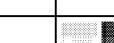
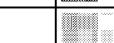
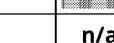
Structures	Asymmetry Index	NR Index*	Z-score	Percentile
Hippocampus	-0.000071	-5.82	-0.38	35.10

## Brain Volume Assessment

Structures	Color	Vol ml	Vol/mTIV in (%)	NR Index*	Z-score	Percentile
Whole Brain Matter	n/a	1197.56	52.04	-2.08	-0.14	44.55
Gray Matter	n/a	428.33	18.61	-11.03	-0.73	23.40
White Matter	n/a	769.23	33.43	8.33	0.55	70.82
Hippocampus	n/a	8.97	0.39	0.72	0.05	51.89
Right Hippocampus	██████	4.64	0.20	1.80	0.12	54.71
Left Hippocampus	████	4.32	0.19	-0.58	-0.04	48.47
Amygdala	n/a	2.36	0.10	-13.16	-0.87	19.33
Right Amygdala	██████	1.32	0.06	-8.63	-0.57	28.50
Left Amygdala	██████	1.06	0.05	-15.79	-1.04	14.94
Putamen	n/a	7.16	0.31	-12.78	-0.84	20.02
Right Putamen	██████	3.71	0.16	-10.74	-0.71	23.98
Left Putamen	██████	3.45	0.15	-14.41	-0.95	17.16
Thalamus	n/a	19.45	0.85	-1.83	-0.12	45.20
Right Thalamus	██████	9.63	0.42	-2.89	-0.19	42.47
Left Thalamus	██████	9.82	0.43	-0.49	-0.03	48.71

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Structures	Color	Vol ml	Vol/mTIV in (%)	NR Index*	Z-score	Percentile
<b>Ventral Diencephalon</b>	n/a	10.42	0.45	-6.42	-0.42	33.64
<b>Right Ventral Diencephalon</b>		5.17	0.22	-6.43	-0.42	33.61
<b>Left Ventral Diencephalon</b>		5.25	0.23	-5.74	-0.38	35.28
<b>Pallidum</b>	n/a	3.59	0.16	0.78	0.05	52.03
<b>Right Pallidum</b>		1.69	0.07	-0.46	-0.03	48.80
<b>Left Pallidum</b>		1.90	0.08	1.83	0.12	54.79
<b>Caudate</b>	n/a	5.67	0.25	-13.85	-0.91	13.11
<b>Right Caudate</b>		2.82	0.12	-13.12	-0.86	19.41
<b>Left Caudate</b>		2.85	0.12	-14.23	-0.94	17.46
<b>Brain Stem</b>		20.68	0.90	-6.01	-0.40	34.63
<b>Frontal Lobe</b>	n/a	405.87	17.64	-4.53	-0.30	38.30
<b>Right Frontal Lobe</b>		204.64	8.89	-3.74	-0.25	40.28
<b>Left Frontal Lobe</b>		201.24	8.74	-5.23	-0.34	36.53
<b>Parietal Lobe</b>	n/a	212.80	9.25	-4.07	-0.27	39.44
<b>Right Parietal Lobe</b>		104.96	4.56	-4.82	-0.32	37.56
<b>Left Parietal Lobe</b>		107.84	4.69	-3.19	-0.21	41.68
<b>Occipital Lobe</b>	n/a	121.82	5.29	8.34	0.55	70.85
<b>Right Occipital Lobe</b>		62.60	2.72	10.37	0.68	75.24
<b>Left Occipital Lobe</b>		59.22	2.57	5.06	0.33	63.03
<b>Temporal Lobe</b>	n/a	241.23	10.48	0.98	0.06	52.57
<b>Right Temporal Lobe</b>		118.39	5.14	-0.82	-0.05	47.84
<b>Left Temporal Lobe</b>		122.84	5.34	2.98	0.20	57.76
<b>Cerebellum</b>	n/a	154.18	6.70	3.89	0.26	60.11
<b>Right Cerebellum</b>		76.92	3.34	3.28	0.22	58.54
<b>Left Cerebellum</b>		77.26	3.36	4.40	0.29	61.39
<b>CSF (+ dura)</b>		486.29	21.13	-7.78	-0.51	30.43
<b>Lateral Ventricle</b>	n/a	61.99	2.69	1.98	0.13	55.19
<b>Right Lateral Ventricle</b>		35.64	1.55	5.41	0.36	63.90
<b>Left Lateral Ventricle</b>		26.35	1.15	-1.87	-0.12	45.11

Text with orange color: All brain matter volumes with a percentile lower than 25% and all CSF structures with a percentile over 75%.

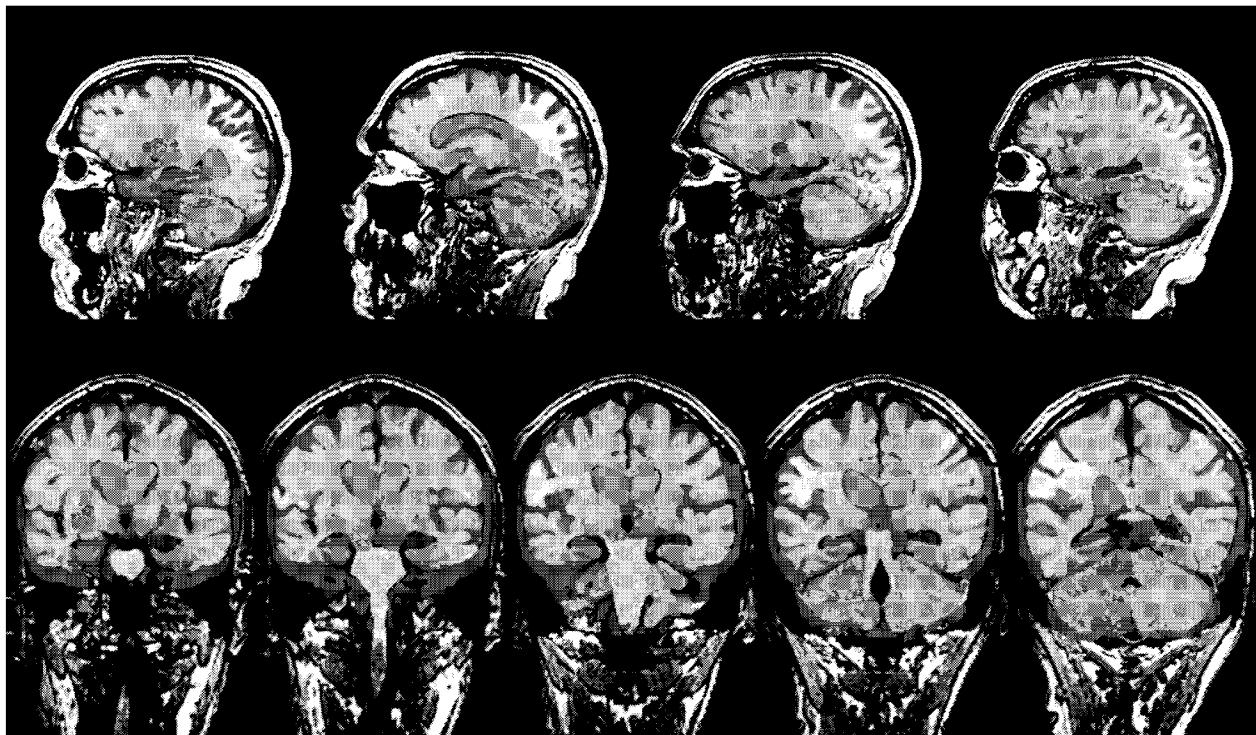
\*) NR Index: Neuroreader® Index

## Summary

All brain matter volumes with a percentile lower than 25% and all CSF structures with a percentile over 75% (orange font):

- Gray Matter (23.40%)
- Amygdala (19.33%)
- Left Amygdala (14.94%)
- Putamen (20.02%)
- Right Putamen (23.98%)
- Left Putamen (17.16%)
- Caudate (18.11%)
- Right Caudate (19.41%)
- Left Caudate (17.46%)

## Quality Assessment Overlay Images



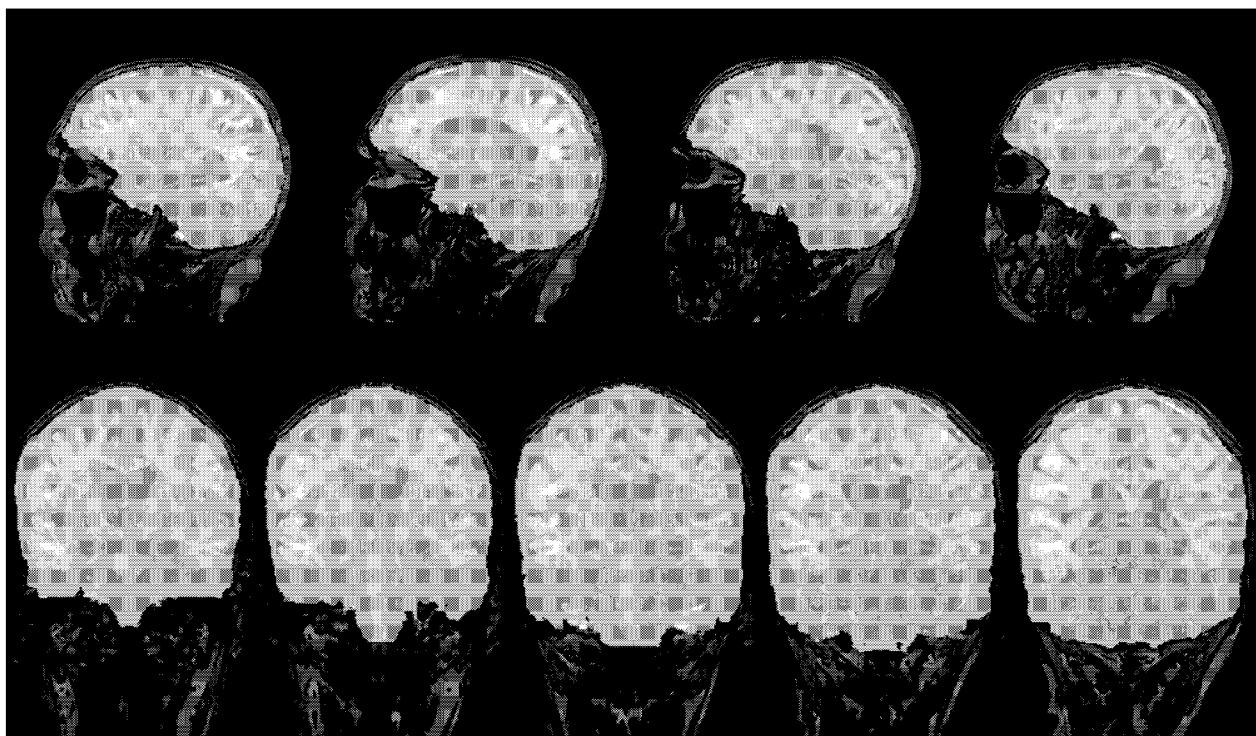
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## Brain Heat Maps



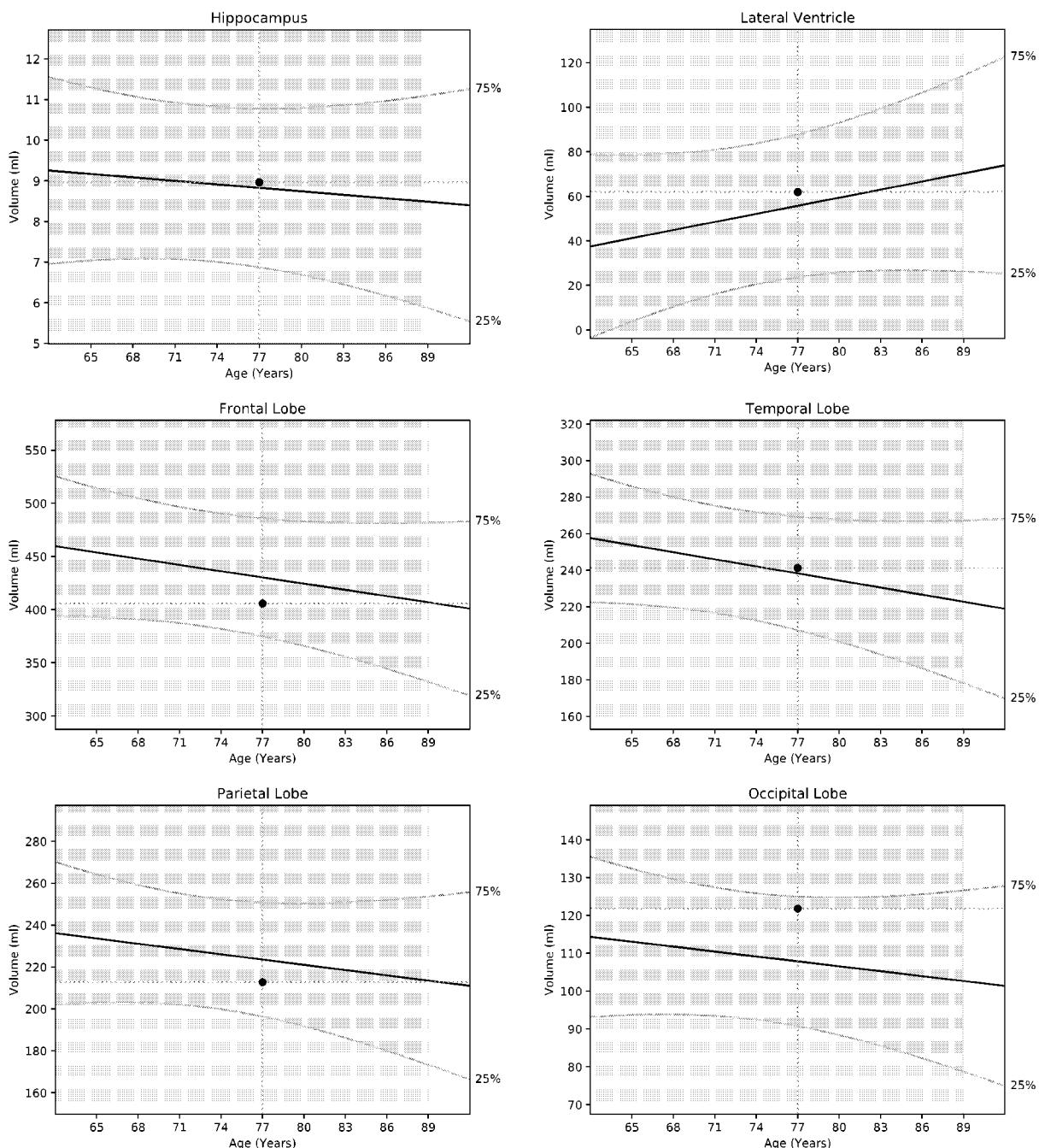
Statistical percentile for each brain structure shown in a color gradient. The orange color scale indicates all brain matter volumes with a low percentile and all CSF and ventricular structures with a high percentile.



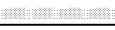
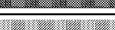
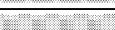
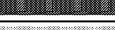
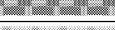
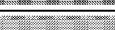
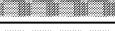
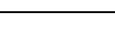
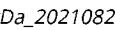
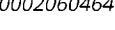
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## Charts



## Brain Segmentation Color Table

<b>Id</b>	<b>Color</b>	<b>Label</b>	<b>Red</b>	<b>Green</b>	<b>Blue</b>
255		Whole Brain Matter	255	0	0
53		Right Hippocampus	0	255	0
17		Left Hippocampus	0	0	255
54		Right Amygdala	255	255	0
18		Left Amygdala	0	255	255
51		Right Putamen	255	0	255
12		Left Putamen	255	128	0
49		Right Thalamus	128	255	0
10		Left Thalamus	0	255	128
60		Right Ventral Diencephalon	0	128	255
28		Left Ventral Diencephalon	255	0	128
52		Right Pallidum	128	0	255
13		Left Pallidum	128	0	0
50		Right Caudate	0	128	0
11		Left Caudate	0	0	128
16		Brain Stem	255	255	128
303		Right Frontal Lobe GM	128	255	255
302		Left Frontal Lobe GM	255	128	255
313		Right Frontal Lobe WM	128	128	0
312		Left Frontal Lobe WM	0	128	128
305		Right Parietal Lobe GM	128	0	128
304		Left Parietal Lobe GM	255	128	128
315		Right Parietal Lobe WM	128	255	128
314		Left Parietal Lobe WM	128	128	255
307		Right Occipital Lobe GM	192	64	64
306		Left Occipital Lobe GM	64	192	64
317		Right Occipital Lobe WM	64	64	192
316		Left Occipital Lobe WM	64	192	192
309		Right Temporal Lobe GM	192	64	192
308		Left Temporal Lobe GM	192	192	64
319		Right Temporal Lobe WM	255	64	64
318		Left Temporal Lobe WM	255	64	192
47		Right Cerebellum GM	255	192	64
8		Left Cerebellum GM	255	192	192
46		Right Cerebellum WM	64	64	255
7		Left Cerebellum WM	64	192	255
24		CSF (+ dura)	192	64	255
43		Right Lateral Ventricle	192	192	255
4		Left Lateral Ventricle	192	255	192